

SUPPORT FOR THE AMENDMENTS

This Amendment amends Claims 1-2 and 12-24. Support for the amendments is found in the specification and claims as originally filed. In particular, support for Claim 1 is found in Claim 2 and in the specification at least at page 30, Table 3, Example 3. Support for Claims 12-24 is found at least in original Claims 12-24. No new matter would be introduced by entry of these amendments.

Upon entry of these amendments, Claims 1-25 will be pending in this application. Claim 1 is independent.

REQUEST FOR RECONSIDERATION

Applicants respectfully request entry of the foregoing and reexamination and reconsideration of the application, as amended, in light of the remarks that follow.

Applicants thank the Examiner for the courtesies extended to their representative during the personal interview on December 8, 2009.

As discussed during the personal interview, the present invention provides a silver alloy which can form a thin film superior in heat resistance (i.e., resistance to roughening and reflectance loss due to heating). The superior heat resistance is achieved by adding to a Ag-Pd-Cu alloy a specific amount of Ge. Specification at [0009].

Claims 1-10 are rejected under 35 U.S.C. 103 over U.S. Patent No. 4,330,331 ("Fujiwara").

Claims 1-23 are rejected under 35 U.S.C. 103 over JP 2002-332568 ("JP-568").

Claim 24 is rejected under 35 U.S.C. 103 over JP-568 in view of JP 10-282907 ("JP-907").

Claims 24-25 are rejected under 35 U.S.C. 103 over JP-568 in view of JP 05-341066 ("JP-066").

Fujiwara discloses an electrical contact material. The material is an internally oxidized silver eutectic alloy system with a main component of silver to which at least one of silicon and germanium is added and at least one selected from at least one of the groups consisting respectively of gold, platinum and the like, titanium, rhenium and the like, and iron, cobalt and the like is further added. Fujiwara at abstract.

JP-568 provides a sputtering target composed of an Ag alloy having high reflectivity and excellent sulfidation resistance which is prepared by adding specific small amounts of metal component (A) selected from Ge, Ga and Sb, specific small amounts of metal component (B) selected from Au, Pd and Pt, and, if necessary, small amounts of Cu to Ag and carrying out alloying. JP-568 at English-language abstract.

JP-907 is cited against dependent Claim 24 for disclosing that Ag alloy can be used as an electromagnetic shielding film. Office Action at page 6, lines 17-18.

JP-066 is cited against dependent Claims 24-25 for disclosing that Ag alloy can be used as a magnetic shield and applied in the form of paste. Office Action at page 6, line 30 to page 7, line 1.

Any *prima facie* case of obviousness based on the cited prior art is rebutted by the significant improvement in heat resistance (i.e., resistance to roughening and reflectance loss due to heating) that is achieved by the present invention when in accordance with independent Claim 1 a silver alloy consisting essentially of 97.00 to 99.79 wt% of Ag, 0.10 to 2.89 wt% of Pd, 0.10 to 2.89 wt% of Cu contains "0.5 to 1.50 wt% of Ge".

This is demonstrated in the specification at Figs. 8-11. Note that data from the specification is equivalent to data from a Declaration Under 37 CFR 1.132 in light of the executed Declaration and Power of Attorney For Patent Application filed January 11, 2007.

Figs. 8(a-d) show, relative to a 98.9 wt% Ag - 0.8 wt% Pd - 0.3 wt% Cu alloy with **no Ge** (Fig. 8(d)), significantly improved smoothness upon heating to 250° in air for one hour when the alloy also contains **0.5 wt% Ge** (Fig. 8(a)); **1.0 wt% Ge** (Fig. (b)); or **1.5 wt% Ge** (Fig. 8(c)).

Fig. 9 shows that after the heating to 250°C the alloy from Fig. 8(a) with **0.5 wt% Ge** exhibited significantly less reflectance loss than the alloy from Fig. 8(d) with **no Ge**.

Figs. 10(a-d) show, relative to a 98.9 wt% Ag - 0.8 wt% Pd - 0.3 wt% Cu alloy with **no Ge** (Fig. 10(d)), significantly improved smoothness upon heating to 85° in 90%RH air for 0.5 hours when the alloy also contains **0.5 wt% Ge** (Fig. 10(a)); **1.0 wt% Ge** (Fig. 10(b)); or **1.5 wt% Ge** (Fig. 10(c)).

Fig. 11 shows that after heating to 85° in 90%RH air for 200 hours a 97.4 wt% Ag - 0.8 wt% Pd - 0.3 wt% Cu - **1.5 wt% Ge** alloy (Example 14) exhibited significantly less reflectance loss than a 97.3 wt% Ag - 0.8 wt% Pd - 0.3 wt% Cu - **1.6 wt% Ge** alloy (Comparative Example 11).

The cited prior art is silent about heat resistance. Fujiwara relates to an electrical contact material high in the sticking resistivity, contact resistance property, erosion resistivity and corrosion resistivity. Fujiwara at column 1, lines 7-11. JP-568 discloses corrosion resistance, halogen-proof nature, oxidation resistance and sulfuration-proof nature. JP-568 at [0001].

However, the cited prior art fails to suggest the significant improvement in heat resistance (i.e., resistance to roughening and reflectance loss due to heating) that is achieved by the present invention when in accordance with independent Claim 1 a silver alloy consisting essentially of 97.00 to 99.79 wt% of Ag, 0.10 to 2.89 wt% of Pd, 0.10 to 2.89 wt% of Cu contains "0.5 to 1.50 wt% of Ge".

Thus, any *prima facie* case of obviousness based on the cited prior art is rebutted. As a result, the rejections under 35 U.S.C. 103 should be withdrawn.

Claim 18 is rejected under 35 U.S.C. 112, second paragraph. To obviate the rejection, "type" is deleted from Claim 18.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Applicants respectfully request favorable consideration and prompt allowance of the application.

Should the Examiner believe that anything further is necessary in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.


Respectfully submitted,

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